

CALIFORNIA CLASS SIZES MATTER: A Review of Research and Educator Voices



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CALIFORNIA'S CLASS SIZE HISTORY

1963

Class size is taken into consideration in the state's school funding formula for the first time, allocating extra funds to districts that meet teacher-pupil criteria.

1964

Today's statutory class size limits are set, and include funding penalties when not met:

- Kindergarten average class size not to exceed 31 students
- No class larger than 33 students
- Grades 1-3 average class sizes not to exceed 30 students
- No class larger than 32 students
- Grades 4-8 average students per teacher of 29.9

1996

The Class Size Reduction (CSR) initiative begins, allocating extra funds to schools that have twenty or fewer students in grades K-3.

2008

Thanks to the CSR Initiative, virtually every district in California had a ratio of 20 students per teacher in Grades K-3.

2009-2012

As a result of the Great Recession, class sizes began to increase again statewide as the legislature allowed districts to raise class sizes while still receiving a partial subsidy.

2012

The class size requirements of the CSR Initiative are removed.

2013

The Local Control Funding Formula (LCFF) was launched and included additional funds for school districts that kept K-3rd grade class sizes below 24, or had agreed to an alternative K-3 class size through collective bargaining.

TODAY

California ranks among the 5 largest student-teacher ratios in the nation.

California teachers are working in some of the largest class sizes in the nation – ranking 5th among the highest educator-to-student ratios in the country.ⁱ In a recent survey of California educators statewide, over three quarters of educators said that overcrowded classrooms are a serious issue at their school.ⁱⁱ This is despite widespread support for smaller class sizes and more student supports from parents, educators, community members, and students themselves. Smaller class sizes and adequate student supports give educators and students a greater opportunity for the type of individual and smaller group support that allows for the full growth and success of every student.ⁱⁱⁱ

When California parents and educators have demanded lowered class sizes, they have often been met with swift resistance from school district administrators and fiscal regulators who argue that lower class sizes are too expensive.^{iv} They are further met with arguments from education reformers that smaller classes do not provide an advantage at all.^v Critics of class size reductions are wrong, though. Research has found again and again that even small reductions in the number of students in a classroom can make a big difference in educators' ability to provide more individualized attention to students, facilitate more learning, and increase students' chances of success.^{vi}

EDUCATORS SAY...

Helping young students grow and learn

Rebecca Lunceford
1st Grade Teacher
Galarza Elementary School, San Jose
Unified School District

Rebecca has 23 students this year. The largest group she has ever taught in her 21 years of teaching was 30 students. First graders are young students still learning self-regulation and social behavior, and Rebecca has observed that in larger classes it has been harder for her students to know each other and to establish routines at the beginning of the year. More kids equal more personalities to manage.

“Class size affects everything. The biggest thing to understand about class size is that it’s not just a numbers game. At the end of the year teachers divide their class up and look at balancing the mix of kids before they go on to the next grade. When you only have two classes per grade level, and those classes are large, it’s difficult to manage all the students’ needs.”

This report provides an overview of the research on class size that demonstrates the numerous ways that class size reductions matter for student learning, social emotional support, and educator stability. We also include the voices of educators from districts across California. These educators, who have on average over two decades of teaching experience, have taught in overcrowded classrooms, taught before and after California’s 1996 Class Size Reduction Initiative, and taught through the Covid19 pandemic and its myriad effects on the classroom environment. These studies and real-life experiences of California educators show us how and why class sizes matter.

California has been the most populous state in the nation since 1960. One in eight people in the U.S. reside here, and California is home to one in ten of the country’s public school students. Large class sizes and how to address them are not new issues for California parents, students, and educators.

“...We can’t demand that teachers be excellent in conditions that preclude excellence,” wrote charter high school teacher Ellie Herman in a 2011 *Los Angeles Times* op-ed.⁷

In 1963, for the first time, class size was taken into account as a criteria for state aid to school districts with the introduction of a new funding model that rewarded districts that met standards for pupil-teacher ratios. The additional state aid was to be allocated to districts in the 1963/64 school year that met a pupil-teacher ratio of 33-1 in elementary districts and 28-1 in high school districts.

California’s current statewide class size limits were set the following year at an average class size of 31 for kindergarten, and 30 students in grades one through eight.

However, these limits were soft caps – the 1964 limits allowed, and continue to allow, a maximum of 33 students in kindergarten, 32 students in grades one through three, and 30 students in grades four through eight. Districts that exceed these limits can face a financial penalty.^{vii} In 1996, California embarked on a massive effort to reduce class sizes with the Class Size Reduction (CSR) initiative. The initiative allocated extra funds per student for schools that had twenty or fewer students in grades K-3. At the time of the launch of the CSR Initiative, California had some of the highest class sizes in the nation, with an average of 28.6 students in grades K through 3 classrooms.^{viii}

The CSR initiative had mixed results, owing at least in part to implementation challenges related to available space and facilities. Teachers taught in libraries, auditoriums, and other makeshift classrooms, and in some cases classes were doubled up into one room.^{ix} Two years later in 1998, however, California teachers were reporting that smaller classes were resulting in fewer classroom disruptions, faster-paced and more in-depth coverage of curriculum, and an increase in student motivation.^x

By 2008, nearly every school district in California had reduced K-3 class sizes to 20 students.^{xi} However, in 2009 the Legislature responded to the financial pressures of the Great Recession by beginning to dismantle the CSR Initiative, first allowing school districts to increase class sizes to 25 or more students while only losing 25% of class-size reduction funding.^{xii} In 2012, the CSR reduction requirements were removed from the Education Code all together.

In 2013, California's current school funding structure, The Local Control Funding Formula (LCFF), was passed by the state legislature. The LCFF provides school districts with more resources for enrollment of low-income students, English learners, and foster youth, and includes financial incentives for districts to keep K-3 class sizes below 24 students or have a collective bargaining agreement that otherwise sets class size targets.^{xiii}

While the present day class size maximums established in the California Education Code keep class sizes in K-3 classrooms below 32 and 33, and the financial incentive built into the LCFF encourages lower class sizes in K-3 classrooms, today California allows and most school districts have much higher class sizes than the 1996 Class Size Reduction Initiative's limits of 20 students in each K-3 classroom.

The State of California Class Sizes Today

California is once again struggling with large class sizes – with the second largest pupil-to-teacher ratios in the nation at nearly 22 students per teacher.^{xiv} The California Education Code stipulates that districts exceeding the mandated class size limits be penalized by a loss of state funding for each student over the limit. However, the Education Code also provides a waiver procedure for districts that exceed the limit, whereby districts can appeal to the State Board of Education (SBE).^{xv}

EDUCATORS SAY...

Room to move and improve in 4th Grade

Jessica Moore
4th Grade Teacher
Chesterton Elementary, San Diego
Unified School District

Jessica has 27 students in her class this year, which is a smaller class than has been the norm for her. She usually has 33 to 36 students. There are large numbers of English language learners in her classroom, as well as children from military families who move around a lot. Six fewer students means more time to build rapport with students and families and more time to spend giving individualized feedback. Fewer students has reduced the ambient noise in her classroom – papers shuffling, chairs scooting - significantly. Her students are having an easier time staying on task, and the overall feeling in her classroom is calmer.

In many school districts, educator unions have negotiated class size caps and reductions that are stronger than the language in the California Education Code. Some of the ways that educator unions have sought to reduce class sizes include bargained class size maximums, language that provides assignments of additional teachers for class size overages, time-bound processes for problem solving in regards to class sizes, day rates paid to teachers for every student over the limit, and making non-adherence to these processes subject to the union's grievance process.^{xvi}

Addressing these issues can be challenging. Educators, parents, community members, and students face pushback about money, facilities, and other priorities. However, research has clearly established that class size reductions have important and undeniable impacts for students and educators.^{xvii}

RESEARCH HAS FOUND THAT LOWERED CLASS SIZES MATTER FOR STUDENTS AND EDUCATORS

Research on the impacts of class sizes finds that class size is a determinant of student outcomes – test scores, graduation rates, and various life outcomes to name a few; and that class size is a determinant of teaching and learning experiences in the classroom environment. Smaller class sizes have been

found by the academic literature to be particularly effective at improving achievement for low-income and BIPOC students.^{xviii}

This report focuses on four studies that are rigorous, controlled, and measured in their analysis and include in their approach a look at how lowered class sizes impact teaching and learning experiences in the classroom environment.

- **STAR**

Tennessee's Student/Teacher Achievement Ratio experiment was a four-year randomized experiment conducted throughout 79 public schools with one cohort of pupils from 1985 to 1990.

Beginning in kindergarten, students were randomly assigned to one of three class types: a small class of 13-17 students, a regular size class of 22-25 students, or a regular sized class (22-25 students) with a teacher's aide. Teachers were also randomly assigned to these class groupings. The study followed the students through Grade 4.^{xix}

- **CSPAR**

The Class Size and Pupil Adult Ratio program, or CSPAR study, was a long-term longitudinal observational study of over 9,000 pupils in over 220 schools over six years from 1996/97 to 2003. The schools were randomly selected from within eight Local Education Authorities, or school districts, located in urban, suburban, and rural areas in the United Kingdom. This dedicated study of the effects of class size developed a range of data sources from which to pull its conclusions.^{xx}

- **MAST and SENSE**

The Making a Statement project, or MAST, was an observational study conducted in 2011 and 2012 of students with a Statement of Special Needs (the U.K. equivalent of an Individualized Education Program, or IEP) in mainstream classrooms. 48 Year Five students with Statements throughout 45 schools in the United Kingdom were observed, along with a corresponding number of "control" students.^{xxi}

The Special Education Needs in Secondary Education project, or SENSE, was a similar study of pupils in secondary schools. This study, undertaken in 2015 and 2016, looked at 60 students with Statements and 112 "comparison" students.

- **Sweden's Study – "Long-Term Effects of Class Size"**

In 2012, Peter Fredriksson et al published an evaluation of the long-term effects of class size in primary school using an array of data from Sweden, which has a maximum class size rule. This analysis focused on cohorts born in 1967, 1972, 1977, and 1982 in districts across Sweden that contained a single upper primary school.^{xxii}

“The peer group provides arguably the most efficient and highly motivating context for the learning and development of social skills which will ultimately enable children to live effectively as a member of adult society.”

(William Maxwell, 1990)

STAR's Findings - 1990

STAR primarily looked at academic achievement. The results suggest that small classes are more effective academically than larger classes in primary grades, and the advantage is greatest for minority students in urban schools. Gains were primarily attributed to students spending more of their time engaged in learning and teachers spending more of their time engaging with students teaching instead of managing a classroom.^{xxiii}

Parent involvement, planning, and personal interactions with students were noted as the top elements for effective teaching among teachers surveyed in the study.^{xxiv} All of these things take time that is reduced with more students to manage.

In 2001, Oxford University published a long-term follow-up analysis that was done of students who participated in the STAR program. The analysis suggests that

attendance in a small class increased the odds that students would opt to seek post-secondary education. Smaller class sizes from grades K through 3 seemed to have raised the likelihood that these students took either the ACT or SAT by the end of high school. Furthermore, attendance in a small class seemed to have a particularly strong benefit for minority students and students eligible for free or reduced meals. The gap between white students and Black students' probability of taking a college entrance exam was cut in half by attending a smaller class.^{xxvxxvi}

CSPAR's findings - 2020

The Class Size and Pupil Adult Ratio (CSPAR) program is a main source of data in Peter Blatchford and Anthony Russell's recent book, *Rethinking Class Size – The complex story of impact on teaching and learning*. The research itself included teacher questionnaires, systematic observation, and case studies. Some of the key findings include:

Teacher to pupil individual attention

The single most frequent response to the teacher questionnaire in the CSPAR study is that class size affects the amount of individualized and one-to-one teaching that is possible. This was corroborated with the observational and case study portions of the project.

Teachers also reported having an easier time in a smaller class with detecting weak areas within reading, math, and science; spending less time on disciplinary issues; and getting to know their students better as individuals.

Lack of physical space in the classroom in classes with more students was also cited as a hindrance to small group work areas and learning centers; investigative work; experiments; and spacing pupils with behavioral issues around a room.^{xxvii}

Peer relations

CSPAR's case studies and questionnaires for year 5 and 6 classes indicated that peer relationships were better in smaller classes and worse in larger classes.^{xxviii}

EDUCATORS SAY...

Kelli Springer
4th Grade Teacher
Hazel Strauch Elementary, Twin Rivers
Unified School District

Kelli has consistently had 32 pupils in her class throughout her teaching career. 32 students in a class was challenging before COVID, but now things are harder.

"It seems like I'm getting more and more kids who need more and more help," she says. "It's hard to meet all the needs in the classroom because of the broad spectrum of needs in the classroom."

A smaller class would make this easier.

"It'd be easier to get more students help...it's fewer things to do, fewer tests to correct, fewer report cards to do, all those things. You don't have to spread yourself so thin."

Kelli's class is also physically cramped, which affects everything from peer relationships to classroom behavior management. *Separating a student who needs to take some time and space to cool off is nearly impossible, as they are only three feet away from anyone. If Kelli had fewer students, she would physically spread them out more.*

"You can't give them a quiet space to get away. They're not really getting away."

In the smaller classes, students showed:

- More cohesive relationships
- Less fragmented social and friendship groupings
- They were more supportive and caring with one another
- They were more tolerant of newcomers and peers with special needs
- They had better and more productive working relationships

Classroom Administration

Time and workload related to teacher assessment of student work, reporting and paperwork, and lesson planning and preparation were all found to be impacted by class size. Blatchford et al referred to this connection as, "...a logical one of quantity."^{xxix} Smaller class size allowed teachers to spend more thoughtful and strategic time assessing students, planning, teaching, and conferring with parents.

MAST and SENSE - 2017

Key findings on class size from the MAST and SENSE studies found that smaller classes meant more interactions for students where they were the focus of teachers' attention. Teachers were able to work with small groups and individuals more often.^{xxx}

Sweden's "Long-Term Effects of Class Size" - 2013

The data collected in this study included educational attainment, tax, and wage information compiled by the Swedish government, and pupil assessments performed at the ages of 13, 16, and 18.^{xxxixxxii}

EDUCATORS SAY...

Tommy Vidulich
4th Grade Teacher
Elder Creek Elementary. Sacramento City
Unified School District

Tommy's union won a reduction in class size in February of 2024, taking the 4th grade classes from 33 pupils to 30. The difference in the classroom has been palpable even with a reduction of only three students. Tommy has more time to build relationships with students and parents, more time to give authentic feedback, and more time for project-based learning, which he finds increases student engagement. He has also found the room is calmer overall.

"Class size reduction is the number one thing I need in order to help my students thrive."

EDUCATORS SAY...

Catching red flags in high school

Ian Sabala

Health Science & Sports Medicine

Instructor

***John F. Kennedy High School, Anaheim
Union High School District***

This year he has 38 students in his largest class, and his smallest class has 36 students. Ian noticed that students were coming back from Covid distance learning with greater emotional needs and a thirst for affirmation. Ian teaches a health class to incoming 9th graders, who need a lot of support as they transition to High School. Having smaller class sizes would make it easier to manage and support his students.

"Having a lot of kids in a class makes it harder to catch red flags," he said. Topics that come up in health class may hit closer

This study found that non-cognitive abilities such as persistence, motivation, emotional stability, and social skills were positively affected by smaller classes.^{xxxiii xxxiv}

In addition, the magnitude of effect of small class sizes on cognitive ability in this study was greater than that of its effect on non-cognitive ability. The analysis found that placement in smaller classes in grades 4 through 6 (ages 10-13) increased cognitive ability tested at age 13, and had long-term positive effects on completed education, wages, and earnings at ages 27 to 42.

RECOMMENDATIONS AND CONCLUSION

It is clear to educators that classrooms are calmer, students are more focused, and better, more productive relationships are fostered between students, educators, and families when class sizes are smaller. These are common themes that shine through the research reviewed in this report as well. Class size reductions in California have historically been spearheaded on both a local and a statewide level. Locally, school district leadership and educator unions can set class size limits through

collective bargaining agreements, with enforceable language that allows educators and education administrators to ensure that the limits are adhered to throughout the school district. On the statewide level, legislators could consider lowering the class size averages and maximums, and build strong enforcement mechanisms for educators and parents into the law.

Smaller classes allow for more individualized attention to students, for teachers to form better and deeper relationships with students, and for more time spent teaching than managing a classroom. California's students, families, and educators deserve the best possible outcomes, and smaller classes are an important part of making that possible.

ⁱ National Center for Education Statistics. 2023-2024 Common Core of Data (CCD) [Data set]. United States Department of Education. <http://nces.ed.gov/ccd/elsi/>

ⁱⁱ <https://www.cta.org/document/the-state-of-ca-public-schools>

ⁱⁱⁱ Blatchford, Peter, and Anthony Russell. 2020. *Rethinking Class Size: The Complex Story of Impact on Teaching and Learning*. N.p.: UCL Press.

^{iv} Blume, Howard. "Teachers Union Rejects District's Offer." *The Los Angeles Times*. September 27, 2018, sec. City and State.

^vMalcolm Gladwell calls class sizes a "thing we are convinced is such a big advantage [but] might not be such an advantage at all. Gladwell, Malcolm. *David and Goliath: Underdogs, misfits, and the Art of Battling Giants*. New York: Back Bay Books-Little, Brown and Company, 2015.

This argument can be summed up simply as, "...a great teacher can handle a boat-load of kids," as *Washington Post* columnist Valerie Strauss put it. Strauss: Class size matters a lot, research shows - *The Washington Post*. Accessed February 21, 2025. <https://www.washingtonpost.com/news/answer-sheet/wp/2014/02/24/class-size-matters-a-lot-research-shows/>.

Bill Gates: Dillon, Sam. "Gates Urges School Budget Overhauls." *The New York Times*, November 19, 2010. <https://www.nytimes.com/2010/11/19/us/19gates.html>.

^{vi}Blatchford, Peter, and Anthony Russell. 2020. *Rethinking Class Size: The Complex Story of Impact on Teaching and Learning*. N.p.: UCL Press.

^{vii} <https://www.cde.ca.gov/fq/aa/pa/cefcsp.asp>

^{viii} Wexler, Edward, JoAnn Izu, Lisa Carlos, Bruce Fuller, Gerald Hayward, and Mike Kirst. 1998. *California's Class Size Reduction Implications for Equity, Practice & Implementation*. PACE-WestEd.

^{ix} Wexler, Edward, JoAnn Izu, Lisa Carlos, Bruce Fuller, Gerald Hayward, and Mike Kirst. 1998. *California's Class Size Reduction Implications for Equity, Practice & Implementation*. PACE-WestEd.

^xWexler, Edward, JoAnn Izu, Lisa Carlos, Bruce Fuller, Gerald Hayward, and Mike Kirst. 1998. *California's Class Size Reduction Implications for Equity, Practice & Implementation*. PACE-WestEd.

^{xi} <https://edsources.org/2012/class-size-reduction-program-continues-to-unravel/8730>

^{xii} <https://capitolweekly.net/state-class-sizes-grow-as-budget-cuts-take-hold/>

^{xiii} California Education Code Section 42238.02(d)

^{xiv} National Center for Education Statistics. 2023-2024 Common Core of Data (CCD) [Data set]. United States Department of Education. <http://nces.ed.gov/ccd/elsi/>.

^{xv} <https://www.cde.ca.gov/fq/aa/pa/cefcsp.asp>; California Education Code (EC) sections 41376 and 41378

^{xvi} See, for example: Sacramento City Teachers' Association. 2017. *Resolution of Outstanding Issues Related to the 2016-2019 Collective Bargaining Agreement By and Between The Sacramento City Unified School District And The Sacramento City Teachers' Association (SCTA)*, union contract. United Teachers of Los Angeles. 2019. 2019 – 2022 AGREEMENT LOS ANGELES UNIFIED SCHOOL DISTRICT and UNITED TEACHERS LOS ANGELES, union contract. San Diego Teachers Association. 2020. COLLECTIVE BARGAINING AGREEMENT between the BOARD OF EDUCATION SAN DIEGO UNIFIED SCHOOL DISTRICT and the SAN DIEGO EDUCATION ASSOCIATION July1, 2020 through June 30, 2022, union contract. Oakland Education Association - Oakland Unified School District. 2022. AGREEMENT BETWEEN OAKLAND UNIFIED SCHOOL DISTRICT AND OAKLAND EDUCATION ASSOCIATION Representing Teachers and Other Certificated Classifications, union contract.

^{xvii} Word, Elizabeth, John Johnston, Helen Pate Bain, B. DeWayne Fulton, Jayne Boyd Zaharias, Charles M. Achilles, Martha Nannette Lintz, John Folger, and Carolyn Breda, *The State of Tennessee's Student/Teacher Achievement Ratio (STAR) Project Technical Report 1985-1990* § (1990).

^{xviii} Blatchford, Peter, and Anthony Russell. 2020. *Rethinking Class Size: The Complex Story of Impact on Teaching and Learning*. N.p.: UCL Press.

^{xix} Word, Elizabeth, John Johnston, Helen Pate Bain, B. DeWayne Fulton, Jayne Boyd Zaharias, Charles M. Achilles, Martha Nannette Lintz, John Folger, and Carolyn Breda, *The State of Tennessee's Student/Teacher Achievement Ratio (STAR) Project Technical Report 1985-1990* § (1990).

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- ^{xxiv} Word, Elizabeth, John Johnston, Helen Pate Bain, B. DeWayne Fulton, Jayne Boyd Zaharias, Charles M. Achilles, Martha Nannette Lintz, John Folger, and Carolyn Breda, *The State of Tennessee's Student/Teacher Achievement Ratio (STAR) Project Technical Report 1985-1990* § (1990).
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- ^{xxxiii} Lindqvist, Erik, and Roine Vestman. Rep. *The Labor Market Returns to Cognitive and Non-Cognitive Ability: Evidence from the Swedish Enlistment*. Stockholm: Research Institute of Industrial Economics, 2010.